

## PROJECT DESCRIPTION

### GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE REPLACEMENT OF PRESENCE AND SET BACK DETECTION ON WESTBOUND MD 108 AT THE INTERSECTION OF MD 108 (OLD ANNAPOLIS ROAD) AND PHELPS LUCK DRIVE/ CENTRE PARK DRIVE IN HOWARD COUNTY. MD 108 WILL BE WIDENED TO PROVIDE A CONTINUOUS AUXILIARY RIGHT TURN LANE IN THE WESTBOUND DIRECTION OF MD 108 BETWEEN THE INTERSECTIONS OF PHELPS LUCK DRIVE/ CENTRE PARK DRIVE AND THE EXIT TO HOWARD HIGH SCHOOL. ALL EXISTING TRAFFIC SIGNAL HEADS WILL REMAIN. MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

### INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR MD 108. THE SIDE STREET SPLIT PHASING AND RIGHT TURN OVERLAP FOR SOUTHBOUND CENTRE PARK DRIVE WILL REMAIN. THE CONCURRENT MAINLINE PEDESTRIAN PHASE ACROSS THE NORTH LEG AND THE ALTERNATE PEDESTRIAN PHASE ACROSS THE EAST LEG WILL REMAIN.

### CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER, LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES SHALL REMAIN.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon  
Assistant District Engineer - Traffic  
Phone: 301-624-8140

Ms. Andrea Abend  
Assistant District Engineer - Utility  
Phone: 301-624-8115

Mr. Ray Johnson  
Assistant District Engineer - Maintenance  
Phone: 301-624-8105

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Edward Rodenhizer  
Chief, SHA Signal Shop  
Phone: 410-787-7652

The Power Company Representative is:  
Baltimore Gas and Electric Company  
7317 Parkway Drive South  
Hanover, MD 21076  
Phone: 410-859-9062

Colonial Pipeline Company  
Phone: 1-800-926-2728

## EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

| ITEM NO | QUANTITY | DESCRIPTION |
|---------|----------|-------------|
| NONE    |          |             |

## EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

| ITEM NO | QUANTITY | DESCRIPTION |
|---------|----------|-------------|
| NONE    |          |             |

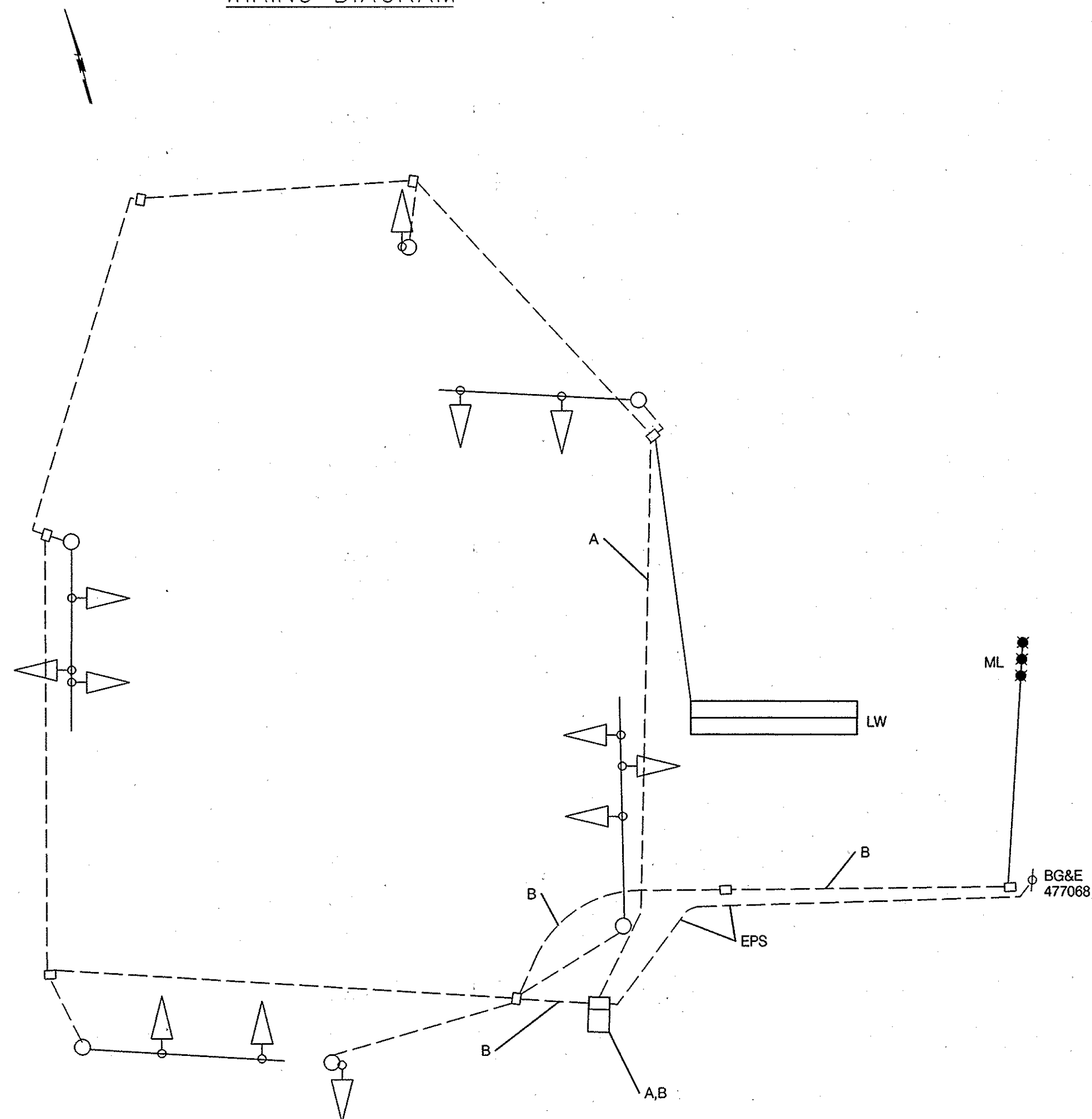
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

## EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

| ITEM NO | QUANTITY | DESCRIPTION   |
|---------|----------|---|
| 120500  | 1 LS     | MAINTENANCE OF TRAFFIC  |
| 585620  | 390 LF   | 12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING |
| 585624  | 45 LF    | 24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING |
| 805011  | 15 LF    | 1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE                                 |
| 805160  | 10 LF    | 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE         |
| 810555  | 1 EA     | MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE                                      |
| 861104  | 120 LF   | ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)                            |
| 862101  | 500 LF   | LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)                              |
| 862102  | 180 LF   | SAW CUT FOR SIGNAL (LOOP DETECTOR)  |

## WIRING DIAGRAM



A - ELECTRICAL CABLE -  
2 CONDUCTOR (ALUMINUM SHIELDED)

B - MICROLOOP PROBE, 1000 FOOT  
LEAD-IN CABLE

LW - LOOP WIRE ENCASED IN  
FLEXIBLE TUBING (NO.14 AWG)

ML - MICROLOOP PROBE SET

EPS - EXISTING POWER SOURCE

## PHASE CHART

|                             | 1  | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13    | 14    | 15    | 16    |  |
|-----------------------------|--|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|--|
|                             |  |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |  |
| PHASE 1 & 5                 |  |      | R    |      |      | R    | R    | R    | R    | R    | R    |      | DW    | DW    | DW    | DW    |  |
| PHASE 1 & 5 CHANGE          | THE CONTROLLER MAY SKIP TO PHASE 1 & 6 OR 2 & 5 OR 2 & 6 |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |  |
| PHASE 1 & 6                 |  |      | G    | R    | R    | R    | R    | R    | R    | R    | R    |      | DW    | DW    | DW    | DW    |  |
| PHASE 1 CHANGE              |  |      | G    | R    | R    | R    | R    | R    | R    | R    | R    |      | DW    | DW    | DW    | DW    |  |
| PHASE 2 & 5                 | R  | R    | R    |      |      | G    | R    | R    | R    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 5 CHANGE              | R  | R    | R    |      |      | G    | R    | R    | R    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 2 & 6                 | G  | G    | G    |      |      | G    | R    | R    | R    | R    | R    | R    | W     | W     | DW    | DW    |  |
| PHASE 2 & 6 PED. CLEARANCE  | G  | G    | G    | G    | G    | G    | R    | R    | R    | R    | R    | R    | FL/DW | FL/DW | DW    | DW    |  |
| PHASE 2 & 6 CHANGE          | Y  | Y    | Y    | Y    | Y    | Y    | R    | R    | R    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 3                     | R  | R    | R    | R    | R    | R    |      |      | G    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 3 CHANGE              | R  | R    | R    | R    | R    | R    | Y    | Y    | Y    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 3 ALT.                | R  | R    | R    | R    | R    | R    |      |      | G    | R    | R    | R    | DW    | DW    | W     | W     |  |
| PHASE 3 ALT. PED. CLEARANCE | R  | R    | R    | R    | R    | R    |      |      | G    | R    | R    | R    | DW    | DW    | FL/DW | FL/DW |  |
| PHASE 3 ALT. CHANGE         | R  | R    | R    | R    | R    | R    | Y    | Y    | Y    | R    | R    | R    | DW    | DW    | DW    | DW    |  |
| PHASE 4                     | R  | R    | R    | R    | R    | R    | R    | R    | R    |      |      | G    | DW    | DW    | DW    | DW    |  |
| PHASE 4 CHANGE              | R  | R    | R    | R    | R    | R    | R    | R    | R    | Y    | Y    | Y    | DW    | DW    | DW    | DW    |  |
| FLASHING OPERATION          | FL/Y   | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | DARK  | DARK  | DARK  | DARK  |  |

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 108 (OLD ANNAPOLIS ROAD) AND  
PHELPS LUCK DRIVE/ CENTRE PARK DRIVE

### GENERAL INFORMATION

SCALE NONE DATE 5/20/06 CONTRACT NO. HO3215176

DESIGNED BY MCG COUNTY HOWARD  
DRAWN BY MCG LOGMILE 13010811.79  
CHECKED BY BAB T.I.M.S. NO. H157  
F.A.P. NO. TOD NO.

DRAWING NO. TS-1795I-GJ OF SHEET NO. 10 OF 12

**STV Incorporated**

engineers / architects / planners / scientists / construction managers  
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

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